

MAT 525 Action Research for Teachers  
Action Research Project  
General Guidelines for the Written Portion

Each student must review a body of literature about a problem of interest. After the initial review of literature has been documented, a research proposal is written and a major professor assigned. The major professor serves as the mentor throughout the project implementation.

Upon the completion and approval of the proposal, the graduate student should contact school officials for permission to gather research data. Some research will only require the permission of the principal, but in other research, permission may be required by a research review committee in the school district. This may take several weeks, and it is wise to start this procedure as soon as the proposal is approved.

The proposal, like any other plan, is subject to change over time. It is unlikely that any student's final Action Research Project will be exactly according to what is originally proposed, but the student and the major professor should always be in agreement as to changes that are made to the original proposal. It is each student's responsibility to see that his or her major professor is informed of progress and/or changes in the Action Research Project throughout its development. The student will complete both a written and an oral report of the project and its findings. While specific instructions for the oral presentation will be provided closer to the time of presentation, the student should note these general guidelines for written work that follow the *Publication Manual of the American Psychological Association (6<sup>th</sup> Ed.)*.

- Handwritten papers are not acceptable; the use of word processing is required.
- Paper for the required copies must be high quality white bond, and standard 8 1/2 by 11 inches.
- Only clear black print is acceptable with 12 point font type in Times New Roman.
- Final copy should be printed on high quality bond paper rather than copy paper.
- The written project will follow APA style. Please consult the Friends University Writing Center or the latest edition of the APA Publication Manual for citation format as well as excellent tips on grammar, diction, and punctuation.
- APA style requires double spacing throughout with no extra spacing between paragraphs.
- Margins should be 1 1/2" on the left to allow for binding, and 1" on the top, bottom and right.
- Indent the first line of every paragraph five spaces—except the abstract page.
- Every page should be numbered—including the title page.
- Center headings for this project in upper and lower case Times New Roman 12 font (**bold** is allowed but no *italic* or underlining).
- Seriation helps the reader understand the organization of key points within sections, paragraphs, and sentences. Items in a series should be identified by bullets (symbols such as small squares, circles, and so forth) (p. 64).
- APA prefers active voice in research writing (p. 77).
  - Preferred:* We conducted the survey in a controlled setting.
  - Nonpreferred:* The survey was conducted in a controlled setting.

- Use a personal pronoun instead of third person when describing the steps taken in your own experiment. Use *I* if you are the sole author of the paper instead of *we* (p. 69).  
*Correct:* We reviewed the literature.  
*Incorrect:* The authors reviewed the literature.
- Use past tense to express an action or condition that happened at a specific time in the past, for example when you are discussing another researcher's work or when you are reporting your own results (p. 78).  
*Correct:* Johnson (2008) *presented* similar results. OR Anxiety *decreased* significantly.  
*Incorrect:* Johnson (2008) *presents* similar results. OR Anxiety *decreases* significantly.
- Use present perfect tense to describe others' research (literature review) and your research project (method and results section) (p.78).  
*Correct:* Since last year, several investigators *have used* this method.  
*Incorrect:* Since last year, several investigators *used* his method.
- Use present tense to discuss implications of the results and to present your own conclusions (p.66).  
*Correct:* The results of Experiment 2 *indicate*...  
*Incorrect:* The results of Experiment 2 *indicated*...

This is the sequence of, formatting style, and what should be included in the sections of the paper.

### **Title Page**

List the title of your work, your name, previous degrees earned and school, as well as month and year of anticipated submission of the project; all are centered on separate lines. Space the separate items of information attractively on the page.

### **Abstract**

Your abstract should follow your title page. An abstract is a one paragraph summary of your project. On the first line centered should be the word Abstract. The next line starts the abstract, but it is not indented like a regular paragraph. Remember readers frequently decide on the basis of the abstract whether to read the entire article; this is true whether the reader is at a computer or is thumbing through a journal. By embedding key words in your abstract, later on other users will be able to quickly locate it while researching. A good abstract is accurate, non-evaluative, coherent and readable, and concise (p. 26). For further details, please see the Writing Center's handout on developing a strong abstract.

*Note:* You will be distributing your **Abstract** and **References Consulted** pages to the class when you present your project orally. Make a second copy of the abstract and have your name printed in the upper left hand corner to identify the referenced action research project.

An abstract of a research study should describe the following (p. 26):

- The problem under investigation in one sentence if possible;
- The participants, specifying pertinent characteristics such as age, sex, and ethnic and/or racial group; in animal research, specifying genus and species;
- The essential features of study method—you have a limited number of words (75-120) so restrict your description to essential and interesting features of the study methodology;
- The basic findings, including effect sizes and confidence intervals and/or statistical significance levels; and
- The conclusions and the implications or applications.

The abstract should also:

- Be double spaced but paragraph is not indented;
- Use key words or define unique terms;
- Should be dense with information but readable, well organized, brief, and self-contained;
- Not include any new information that would not appear in body of paper;
- Summarize ideas from paper—not include quotes; and
- Use third person—no first person (I, we, our, etc.).

### **Introduction and Identification of the Problem**

The title of paper should appear centered on the first line of page three. If it is a long title, use two lines centered at the top. No extra spacing is required between the title and the first line of text.

If your introduction is less than one page, you do not need to include a section heading to identify it as a separate section. Two or three brief paragraphs should state the need and/or the purpose for study. Possible information items to include are the historical view of the problem or the relevance of the problem to practice and theory. One or two brief paragraphs should state the problem explored in this study and summarize any relevant arguments. In a relatively short period of time readers should have a firm sense of what was done and why.

Each of the following sections will require a printed section heading. Only the References Consulted is required to begin on a new page, but if you have only a few lines at the bottom of a page to begin a new section, begin a new page and print the section heading at the top of that page.

### **Review of the Literature**

Summarize or explain main findings in the literature. Include everything found in the literature even if your study does not support it or you do not agree with it. Integrate the literature and interpret it; don't just list it sequentially. Cite the source of information, using correct APA style. All of the literature review should be in past or present perfect tense to describe others' research.

- Include introductory paragraph in this section—followed by several main ideas with supporting details—and then a concluding paragraph;
- All information is factual and objective; no commentary from researcher’s point of view;
- Cite at least 7-10 sources—make sure they relate to topic of study;
- If you are paraphrasing a specific idea from another work, you only have to make reference to the author and year of publication in your in-text reference, but APA guidelines encourage you to also provide the page number or paragraph number, especially when it would help the reader locate the relevant passage in a long or complex text (p. 171).

Students in both high school and college have found the formatting rules of APA difficult (Smith, 2007). A recent study of college freshmen in 100 private universities showed that APA style is a difficult citation format for first-time learners (Jones, 2008, p. 199).

- Summary citations—include parenthesis and have author’s last name along with year of publication; if more than one study is cited, put them in alphabetical order—using **&** before last name in list of multiple authors, and semi-colons between the citations within the same parentheses.

(Brown, 2007; Downing & Nottingham, 2008; Gleason, 2006)

- Each source must also be cited more thoroughly on the References page.

## **Method**

Describe how you conducted your research project. Include as much detail as possible. What specific actions did you take that make this true Action Research? What instrument(s) was/were used? What was the source of each instrument or how were the instruments developed? Who were the participants or subjects? What were the major steps taken to implement the research? When did each step take place? Over what time period were data collected and how long did the research project last?

What specific data were collected over that period of time? How were these data collected? How were the data analyzed? Basically, you should tell the reader what you did and how you did it in enough detail that anyone reading your study could easily do exactly what you did. Be sure to include everything a reader would need to know if he or she would like to replicate the study exactly as you conducted it. You might include appendices for specific forms, instruments, or detailed information.

## **Results**

State or show the results of the study in sufficient detail to justify your conclusions. It is sometimes best to restate the research question or objective and then proceed to provide clear results that are directly related to the study’s purpose. Do not hide uncomfortable results by omission. Discussing the implications of the results should be saved for the Discussion section (p. 32). Charts, tables, and graphs are expedient and the most effective ways to show results, but they will require some explanatory

narrative text. They will be displayed in the Appendix section after the References page. Enlarged copies of these graphics might well become a part of your oral presentation.

- Make sure to restate the study's purpose.
- Summarize the data collected and all relevant results.
- When referring to tables and figures, make sure to label them in the text of the paper (see Table 2 for raw RT values for each of the two age groups; see Figure 1).
- Narrative that is included should only discuss numbers and data---make no commentary.
- This section should be easy to interpret for the reader.

### **Discussion or Conclusion**

After giving your results, you are now able to evaluate and interpret the implications of your study. Clearly state the conclusions you have drawn concerning your purpose in this study. Conclusions should be reasonable and logical and should relate directly to the purpose of the study. Alternative explanations of results should be included and eliminated, if possible. Conclusions should be tied to literature findings and either support or refute what was found there. Conclusions that are not supported in the literature should be explained. Your statements about results should be in present tense (The results indicate that...). Remember to make this section detailed. Discuss the numbers from results and add commentary based on observations and notes from specific incidents.

### **Limitations of the Study**

This section explains all the ways that the study might have shortcomings. Look at two or three factors that would limit the use of the results. If the sample is very small, admit that here. If the results should not be generalized (as is often the case with action research) to a wider population, state why not. Anything that may have made data less accurate or may have biased the results or conclusions in some way should be mentioned and justified if possible.

### **Suggestions for Further Study**

You should discuss what further study is suggested by the work you have done. Would you have tried a slightly different approach if you had it to do over? Would it be better if others who were interested in this topic focused the topic differently? List the next steps if research were to continue.

### **References**

For this particular project, you will cite not only all of the sources used in the paper but also all of the sources that you consulted for the project. APA suggests having a References page that

shows only the sources you used in the paper; you will start this section on a new page. You will center at the top of the page the words: **References**. You will need to carefully follow the APA format for citing reference citations. Use the *Publication Manual of the American Psychological Association (6<sup>th</sup> Ed.)* We have several copies located in the Writing Center, and you can access any of our handouts based on the Publication Manual. An example will be provided with this guideline.

- Make sure to list every source that you have cited in the text of your paper.
- Every citation will include author's name, date of publication, title of article, source (along with volume number, issue number, and possibly page number in some cases), and how you accessed the information.
- Double space throughout—no extra spacing between entries.
- Use hanging indent on second and all following lines of reference citations.
- Arrange in alphabetical order by author's last name.

*Note:* Later on you will be presenting your project orally; at that time you will need to give classmates a copy of your **Abstract** and the **Annotated Bibliography**. The Annotated Bibliography will include not only the references that you used in the paper but also any pertinent resources that you considered using for your paper but eventually choose not to use in the text. All of the sources should be cited in alphabetical order, following the same format as the References page.

### **Appendices and Supplemental Materials**

Material that supplements the paper can be included in an Appendix section that will follow the References page. An appendix is appropriate for “materials that are relatively brief and that are easily presented in print format” (p. 39). Supplemental materials are usually web-based, online supplemental archives that tend to be more appropriate for material that is available as a direct download as well as materials that are not as easily presented in print format (p. 39).

Since the last edition of the APA Manual, this area has been affected the most by technological developments. “Tables and figures enable authors to present a large amount of information efficiently and to make their data more comprehensible” (p. 125). The purpose of using a table is to show some sort of numerical value or textual information, and it is usually always arranged in an “orderly display of columns and rows.” A figure can include a “chart, a graph, a photograph, a drawing, or any other illustration or non-textual depiction” (p. 125). Sometimes it is difficult to decide if something is a table or figure, but tables are almost always characterized by a row-column structure. Using any other type of illustration is referred to as a figure. The new 6<sup>th</sup> edition devotes an entire chapter to displaying results through the use of tables and figures. When you get to this section of your project, stop by the Writing Center and look at the newest edition and the examples for all of the different ways of displaying types of data.